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Prevention and Mitigation:

The First Phase of Emergency Management for Schools

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Objectives

- To provide an overview of the first phase of emergency management (prevention/mitigation) and explain the importance of its role in the school safety planning process;
- To show why risk assessments should be an integral part of a school prevention/mitigation plan;
- To show how to conduct risk assessments to identify factors or hazards that may put school buildings, students, and staff at risk; and
- To provide an understanding of the importance of using data in each phase and how the data can be used to provide valuable information that can evaluate and support the overall emergency response and crisis management plan.

Prevention

- School officials conduct an assessment to identify the hazards in and around their schools that are **preventable** and then develop procedures designed to **prevent** them.





Risk assessment

Goal:

To take the “safety pulse” of the school by looking closely at established emergency response protocols and indicators including but not limited to: acts of violence, weapons possession, bullying, gang activity, substance abuse, intruder access, vandalism, and loitering.



What is a risk assessment?

A process where school officials:

- **Identify** any foreseeable **hazard** in and around the school environment that can potentially harm students, staff or visitors.
- **Assess** the **risk** from the **hazard**. What kind of injury can it cause? Can the hazard cause a serious disruption to the educational mission?
- Take steps to try to **prevent** or **eliminate** the hazard. Or if this is not possible, do what is possible to control or **mitigate** the risk from the hazard. Periodically **review** and **evaluate** the measures that are taken to eliminate hazards and reduce risks. Always look for a safer way of conducting business.



Benefits of a risk assessment

- A structured process that can be used as a basis from which to (re)allocate human and fiscal resources.
- Will greatly increase the efficiency and long-term benefit of school safety efforts.



Who should be involved?

- **School resource officers or security personnel**
- **School administrators and deans**
- **School aides**
- **Guidance counselors**
- **Teachers**
- **Parent representatives**
- **Safe and drug free school coordinators**
- **Special education faculty**
- **Custodians**
- **Students (where appropriate)**



Definitions

- **Hazard:** Any substance, situation, or condition that is capable of causing harm.

Simply put, a source of danger.

- **Risk:** The possibility of suffering harm or loss or danger through the exposure to a **hazard**.

Simply put, the chances of being exposed to a source of danger.

The assessment process during the prevention phase

Gather the facts – the facts ma'am (or sir), just the facts!!



- All security and safety related policies of the school and the school district
- School floor plans
- School crime reports (current and prior year)
- Student and teacher handbooks
- Student codes of conduct
- When conducting site surveys or safety audits, consultants can be helpful, but they should **never** conduct the survey or audit without the help of local school officials and law-enforcement or school security personnel



Hazard Identification

INSIDE THE SCHOOL ENVIRONMENT

- While working closely with school safety personnel within the school (e.g. school resource officers or security personnel; school administrators and deans; school aides; guidance counselors; teachers; safe and drug free school coordinators; special education faculty; custodians; and, where appropriate, students) school officials should identify sources of potential ***physical*** hazards within the school environment.
- Examples of potential physical hazards are:
 - Obstructions in front of fire exits
 - Missing hardware on light fixtures
 - Missing ceiling tiles
 - Elevator doors that are not properly fitted or secured
 - Liquid spills in cafeterias and hallways
 - Unlocked chemical storage facilities
 - Unlocked classrooms, especially chemistry or biology labs
 - Inoperable public address systems ***



Use of data - Connecting the dots

Data should be used to help school officials determine the sources of **preventable** criminal, discipline, or health care related activity in and round their schools.



Use of data – Connecting the dots

- **Incident data from school security, SRO's and local law enforcement (police calls for service in the neighborhood)**
- **Information obtained from local and national safety surveys of school staff and students**
- **Suspension, expulsion, and truancy data**
- **High rates of staff or student turnover or transfers**
- **Risk management claims**
- **Information obtained from local public health agencies, such as hospitals, clinics, etc.**
- **Information obtained from fire officials**

Data

Apples



Versus

Oranges





After you review the data, set your goals

- What are our priorities?
- What are our resources?
 - in the school?
 - in the community?
- How do we match these resources to our priorities?
 - ** try to select viable, attainable solutions**
- What are the benchmarks? There must be a firm commitment to monitor the process – do we scale up or scale down?

The Prevention Phase – Action Steps

- Review traffic patterns and landscaping; Crime Prevention Through Environmental Design (CPTED)
- Review crime/incident data and meet frequently with police officials; develop student codes of conduct
- Use security equipment such as cameras, access control systems, and metal detectors
- Conduct searches of isolated areas on campus (e.g., Scanning, Analysis, Response and Assessment (Sara model))





Conducting Threat Assessments

In May 2002, the U.S. Department of Education and the U.S. Secret Service released the findings of their multi-year study on threat assessment and its relationship to the prevention of targeted school violence.



Threat assessment in schools – key findings:

- Incidents of targeted violence at school *rarely* were sudden, impulsive acts.
- Prior to most incidents, other people knew about the attacker's idea and/or plan to attack.
- There is no accurate or useful “profile” of students who engaged in targeted school violence.
- Most attackers engaged in some behavior prior to the incident that caused others concern or indicated a need for help.
- Many attackers felt bullied, persecuted or injured by others prior to the attack.



Evaluating the Prevention Phase

Compare the information received from original data sources

- Conduct pre/post staff and student safety surveys

PERCEPTION vs. REALITY

- Determine if there a reduction in the amount of targeted concerns (i.e., truancy, suspensions; violent incidents)?



The prevention phase – summing it up

- Conduct security assessments
- Review data from internal and external sources
- Determine priorities and set attainable goals
- Review, evaluate, modify, and implement

Mitigation

- School officials conduct an assessment to identify potential hazards in or around their school that they cannot **prevent** and develop procedures designed to **mitigate** the damage that these hazards might cause.





The Process

During the **mitigation** assessment process, the *team* at a minimum should focus on:

- **The natural or physical hazards that are unique to their neighborhood or region**
- **The effectiveness of established evacuation sites and routes**
- **Data obtained from local public health locations like hospitals, clinics etc.**



Natural hazards

Speak with local emergency management officials to determine the natural disasters that are particular to your community or region.

Regional Offices

Regional And Area Offices:

www.fema.gov





Proximity

- People or property closer to a hazard are more vulnerable to its effects.
 - Coastal regions prone to hurricanes
- Keep in mind that urbanization does not help to reduce vulnerability.



Hazard Identification during the mitigation phase

OUTSIDE THE SCHOOL ENVIRONMENT

- While working closely with local emergency management officials, data should be collected to assess potential hazards in the community.
- Examples of key locations include:
 - Laboratory and Agricultural facilities
 - Chemical manufacturing and storage locations
 - Facilities for storage of infectious waste
 - Fireworks factories and storage facilities
 - Military installations or munitions factories or depots
 - Pesticide manufacturers or distributors
 - Petrochemical refineries or storage facilities
 - Pharmaceutical companies
 - Radiological power plants or fuel processing facilities
 - Water treatment and distribution centers
 - Railroad crossings
 - Government buildings or landmarks

1/6/05 Train Crash in Graniteville, S.C.,





Incident: Train Collision in North Korea – April 22, 2004

- **Two fuel trains that collided at a North Korean railroad station Thursday ignited a deafening explosion that rained debris for more than 10 miles around, South Korean media reported. One television channel said as many as 3,000 people might have been killed or injured.**
- **The collision reportedly took place about 1 p.m. in Ryongchon, a town 12 miles from China. One train was carrying oil and the second had liquefied petroleum gas, media reported.**
- **The blast leveled the train station, a school and apartments within a 500-yard radius. Two schools took the brunt of the blast; one of which is no longer recognizable as a building. The three-story primary school, which had closed for lunch at midday, was badly damaged by the blast but most of the 1,000 pupils and their teachers had already left the building. The death toll of children in the schools was 76.**
- **“The primary school next door was also badly damaged and the buildings don’t look as though they will be any use to anyone”- David Slinn, British Ambassador to North Korea after surveying the disaster site.**

Source:© [Thomas Crosbie Media](#), Saturday, April 24, 2004.

Residents of Ryongchon township clean up at the demolished primary school on April 25, 2004 following Thursday's huge train blast at Korea's Ryongchon station.

Source: REUTERS



January 29, 2003
**At Least 3 People Killed, 37 Injured In Explosion At
Kinston, NC Pharmaceutical Plant**



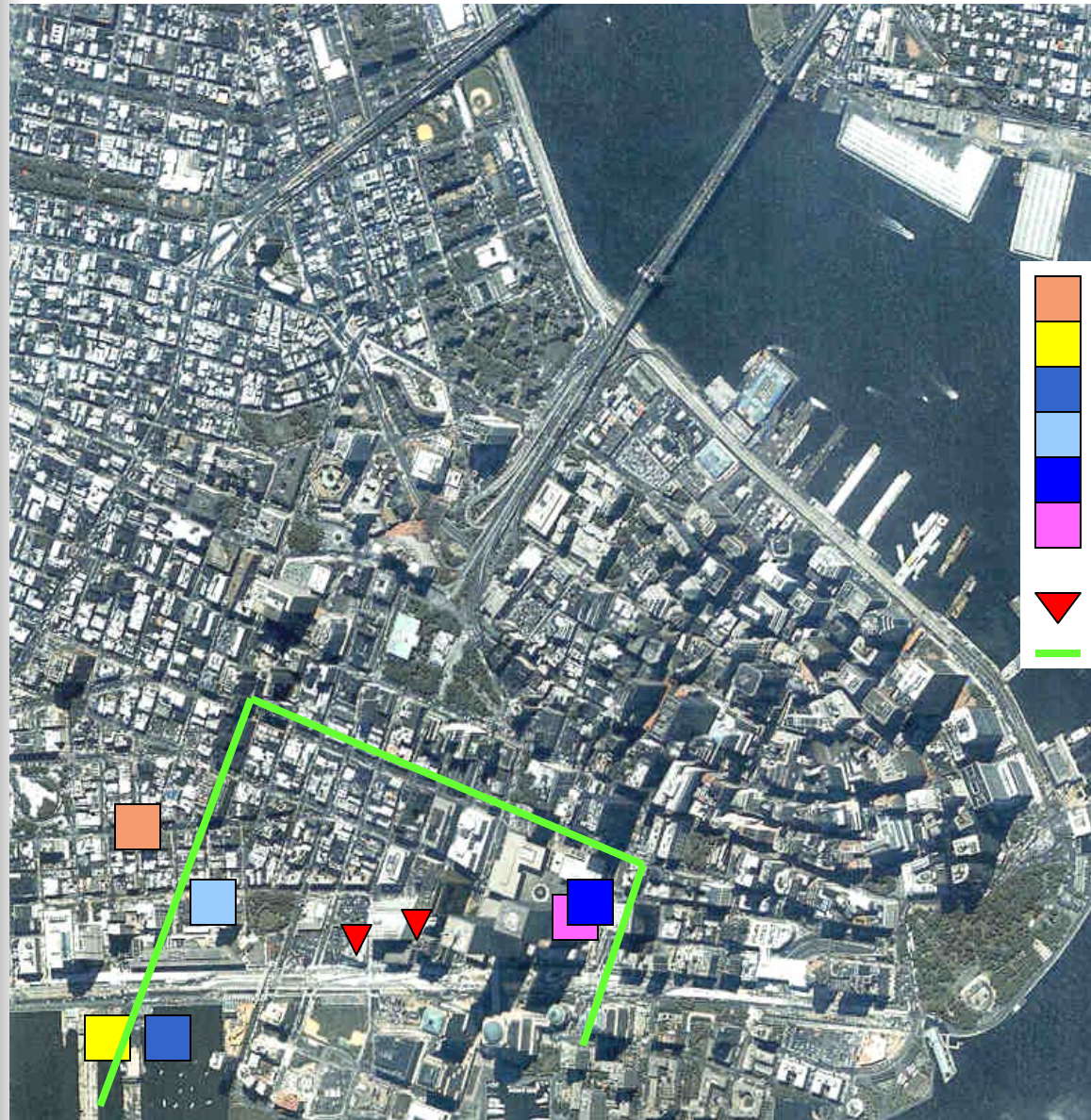
Officials say debris was blown miles away from the plant, causing small fires in nearby wooded areas.









Students from nearby Parrott Academy Private School were evacuated as a precaution. Windows in as many as 10 classrooms were blown out from the impact. One student who was cut by flying glass received stitches.



Satellite Image Map Manhattan, New York



Ground Zero Schools

-  P.S. 150
-  Stuyvesant H.S.
-  P.S.- I.S. 89
-  P.S. 234
-  Leadership & Public Service H.S.
-  Economics and Finance H.S.
-  World Trade Centers
-  Ground Zero Border

The Program for School
Preparedness and
Planning
National Center for
Disaster Preparedness



Data from public health officials

- Asthma intervention and control programs
- Nutrition programs
- Heart related injuries
 - screening programs for athletes

The Mitigation Phase – Action Steps

- **After reviewing local hazard data, assess site selections for schools, annexes, and athletic venues**
- **Use automatic external defibrillators (AEDs); train school staff in CPR and first aid; employ school nurses**
- **In earthquake, hurricane, or tornado zones, properly secure bookshelves and lighting fixtures**
- **Choose at least three evacuation locations**





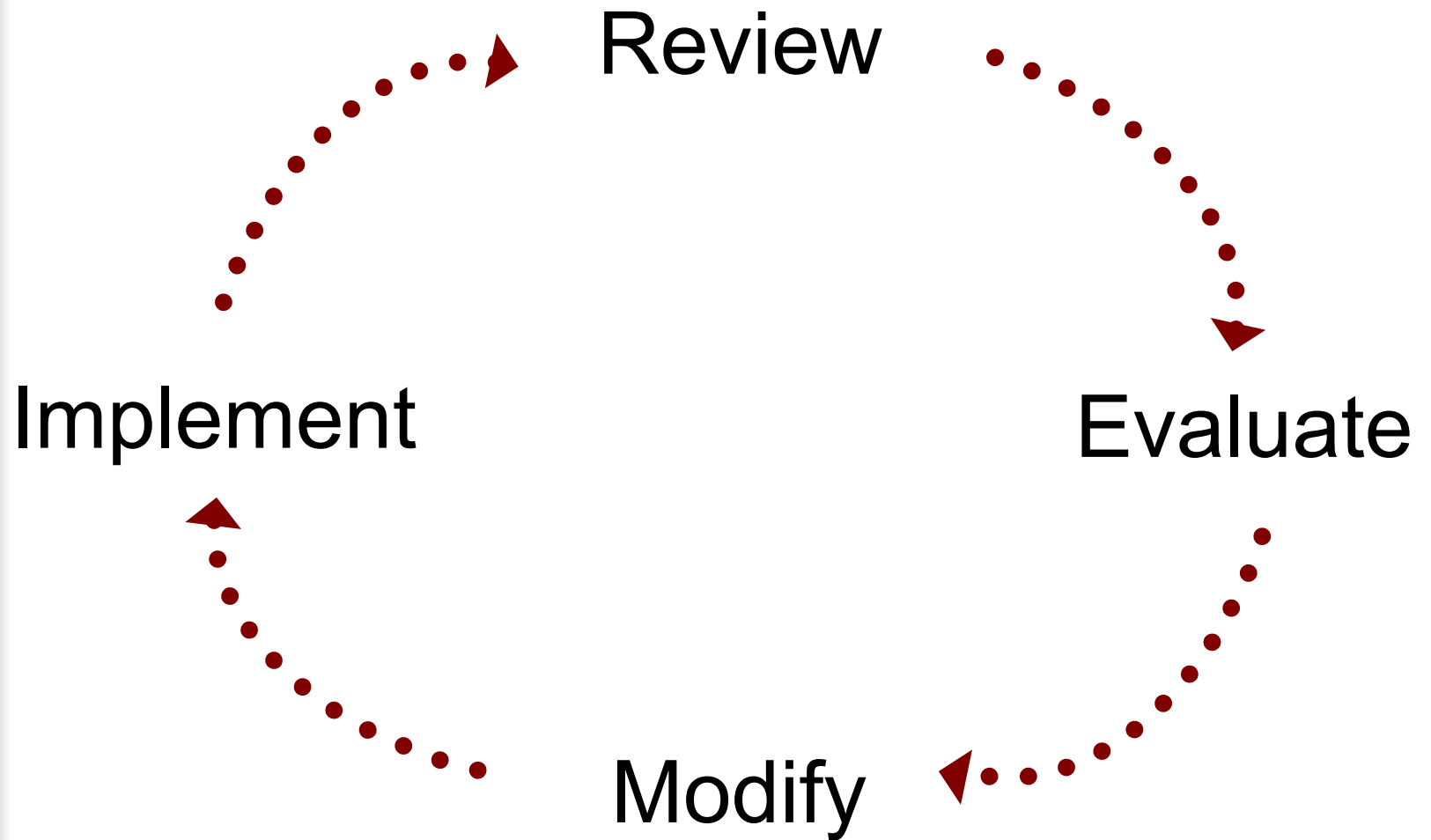
Evaluating the Mitigation Phase

- Compare data information with public health officials
- Conduct fire and evacuation drills **before** disaster strikes
- Conduct single and multiple agency tabletop exercises
- Conduct multi-agency functional exercises



The mitigation phase – summing it up

- Conduct vulnerability assessments with law enforcement and emergency management officials
- Review data on natural disasters and work with facility experts to retrofit your school if necessary from internal and external sources
- Review data from public health officials and implement programs to reduce health related injuries
- Conduct tabletop and multi-agency functional drills and exercises
- Review, evaluate, modify, and implement



Thank you

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